

WHAT IS CLAIMED IS:

1. A system for providing a feedback signal in a telecommunications network, comprising:

5 a plurality of bus control modules operable to generate a feedback signal;

10 a lower level distribution module coupled to the bus control modules, the lower level distribution module operable to receive the feedback signal and to insert feedback information for the lower level distribution module into the feedback signal; and

15 a timing generator coupled to the lower level distribution module, the timing generator operable to receive the feedback signal and to provide the feedback signal to a controller for response.

20 2. The system of Claim 1, further comprising a plurality of cards coupled to each bus control module, each card operable to provide feedback information to the bus control module, the bus control module operable to generate the feedback signal based on the feedback information from the cards.

25 3. The system of Claim 1, further comprising an intermediate level distribution module coupled to the lower level distribution module and to the timing generator, the intermediate level distribution module operable to receive the feedback signal and to insert feedback information for the intermediate level distribution module into the feedback signal.

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4. The system of Claim 3, the feedback signal comprising a plurality of frames, the intermediate level distribution module operable to insert the feedback information into a specified frame of the feedback signal.

5. The system of Claim 3, further comprising an upper level distribution module coupled to the intermediate level distribution module and to the timing generator, the upper level distribution module operable to receive the feedback signal and to insert feedback information for the upper level distribution module into the feedback signal.

6. The system of Claim 5, the feedback signal comprising a plurality of frames, the upper level distribution module operable to insert the feedback information into a specified frame of the feedback signal.

7. The system of Claim 1, the feedback signal comprising a plurality of frames, each bus control module operable to insert feedback information for the bus control module into a specified frame of the feedback signal.

5        8.    The system of Claim 1, the feedback signal comprising a plurality of frames, the lower level distribution module operable to insert the feedback information into a specified frame of the feedback signal.

      9.    The system of Claim 1, the feedback signal comprising an alarm signal.

10. A method for providing a feedback signal in a telecommunications network, comprising:

generating a feedback signal with a plurality of bus control modules;

5 providing the feedback signal from the plurality of bus control modules to a lower level distribution module;

inserting feedback information for the lower level distribution module into the feedback signal; and

10 providing the feedback signal from the lower level distribution module to a controller.

11. The method of Claim 10, further comprising responding to the feedback signal with the controller.

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12. The method of Claim 10, further comprising providing the feedback signal from the lower level distribution module to an intermediate level distribution module and inserting feedback information for the intermediate level distribution module into the feedback signal.

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13. The method of Claim 12, the feedback signal comprising a plurality of frames, the intermediate level distribution module corresponding to a specified frame, inserting the feedback information into the feedback signal comprising inserting the feedback information into the specified frame of the feedback signal.

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14. The method of Claim 12, further comprising providing the feedback signal from the intermediate level distribution module to an upper level distribution module and inserting feedback information for the upper level distribution module into the feedback signal.

15. The method of Claim 14, the feedback signal comprising a plurality of frames, the upper level distribution module corresponding to a specified frame, inserting the feedback information into the feedback signal comprising inserting the feedback information into the specified frame of the feedback signal.

16. The method of Claim 14, further comprising providing the feedback signal from the upper level distribution module to the controller.

17. The method of Claim 10, the feedback signal comprising a plurality of frames, each bus control module corresponding to a specified frame, generating the feedback signal with the bus control modules comprising generating the specified frame of the feedback signal at the corresponding bus control module.

18. The method of Claim 10, the feedback signal comprising a plurality of frames, the lower level distribution module corresponding to a specified frame, inserting the feedback information into the feedback signal comprising inserting the feedback information into the specified frame of the feedback signal.

19. A method for providing a feedback signal in a telecommunications network, comprising:

providing a feedback signal comprising a plurality of frames;

5 assigning each of a plurality of modules to a specified frame of the feedback signal; and

modifying the specified frame with the assigned module.

10 20. The method of Claim 19, modifying the specified frame with the assigned module comprising inserting feedback information for the assigned module into the specified frame.

15 21. The method of Claim 19, further comprising:

providing the modified feedback signal to a timing generator; and

responding to the modified feedback signal with the timing generator.

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22. The method of Claim 19, the plurality of modules comprising bus control modules and distribution modules.

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